

FIG. 1

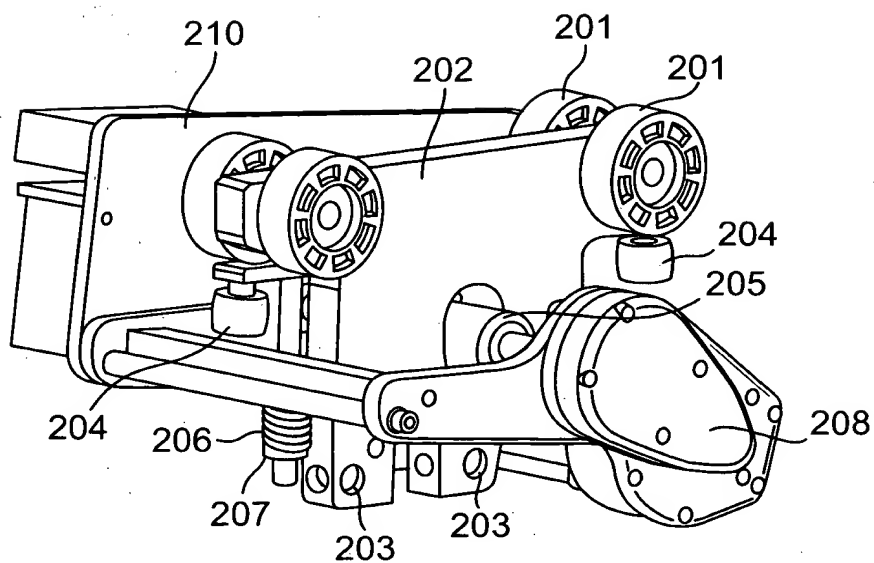


FIG. 2

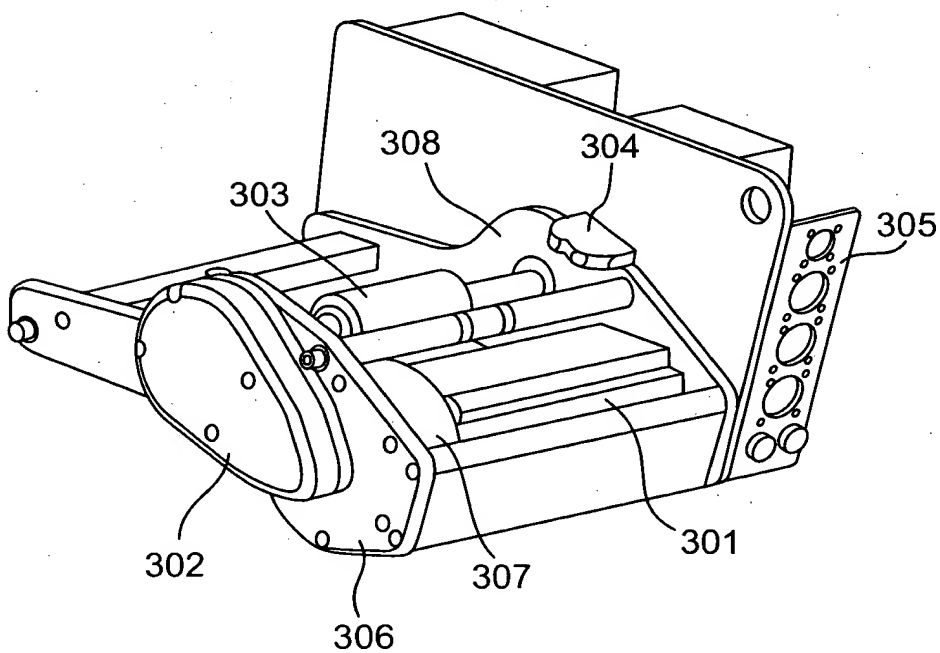


FIG. 3

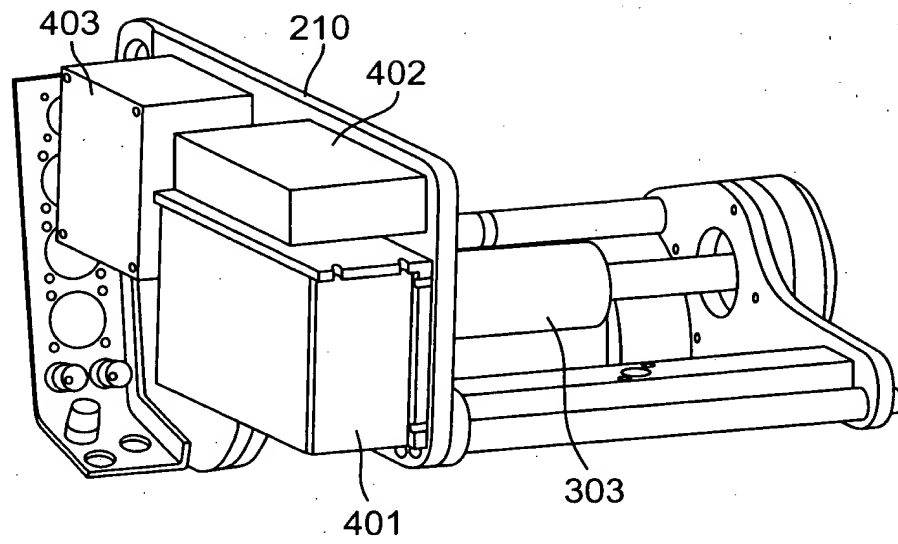


FIG. 4

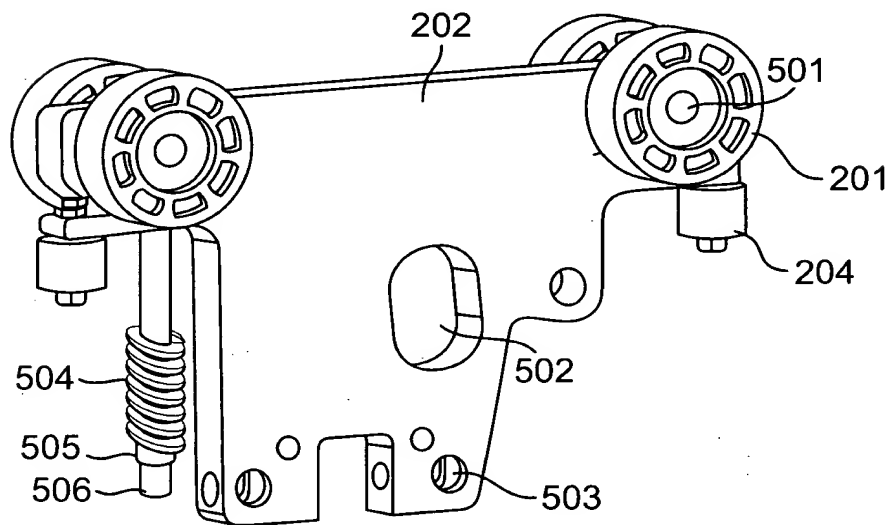


FIG. 5

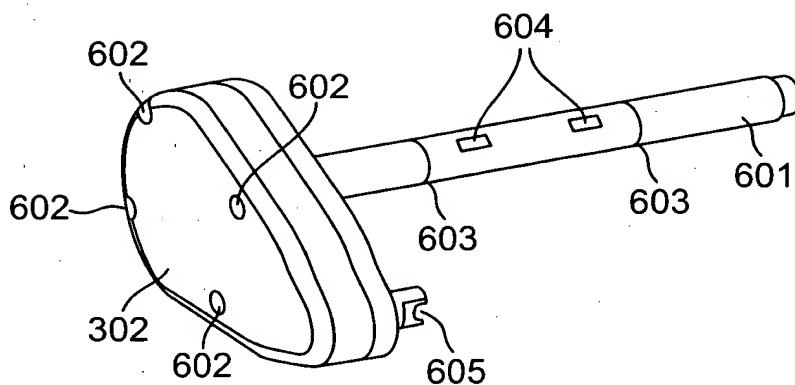


FIG. 6

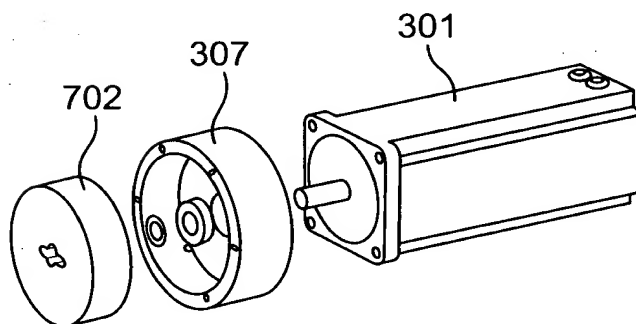


FIG. 7

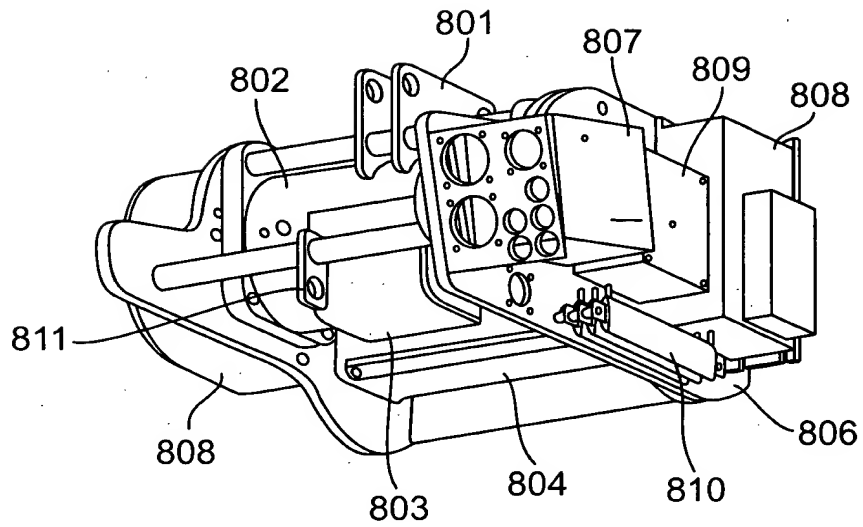


FIG. 8

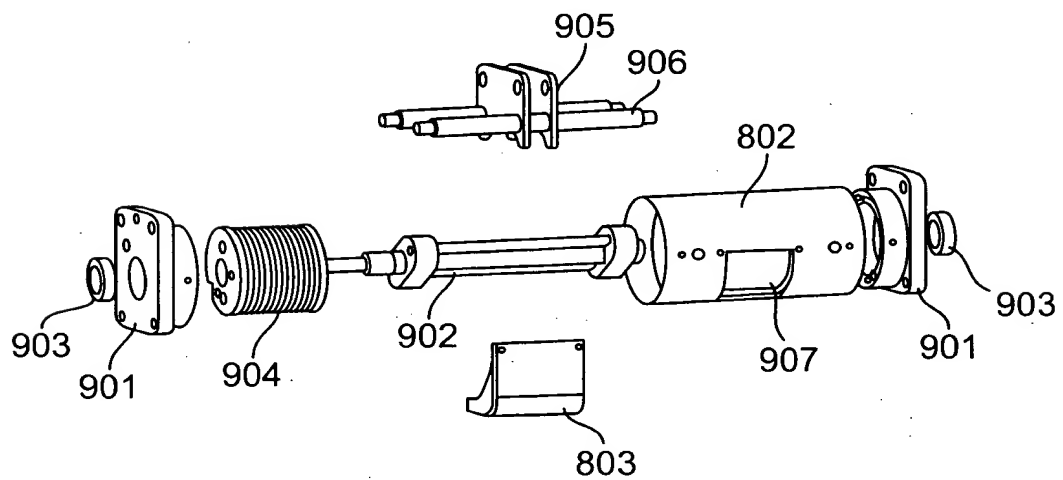


FIG. 9

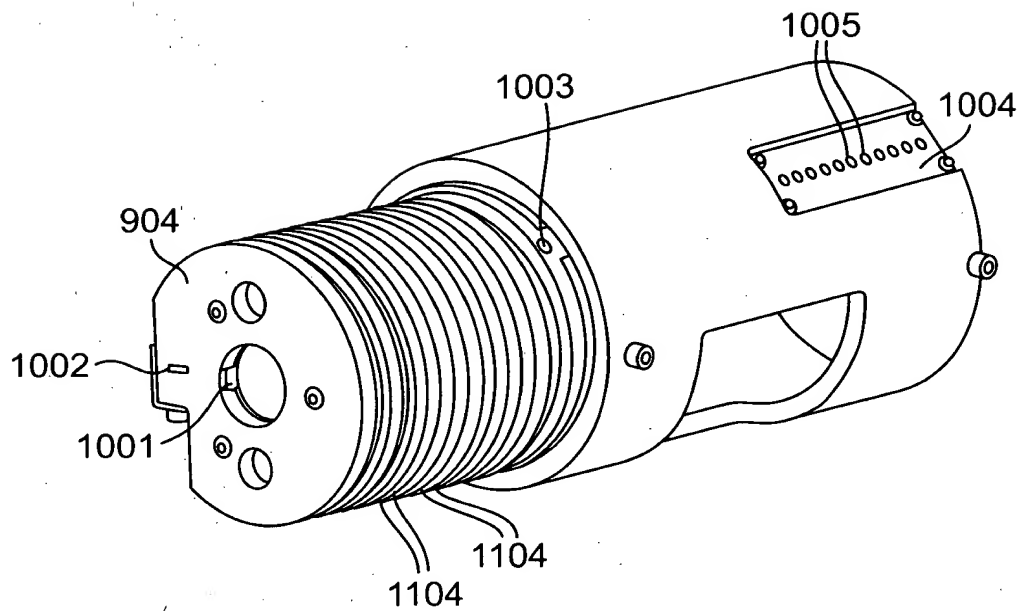


FIG. 10

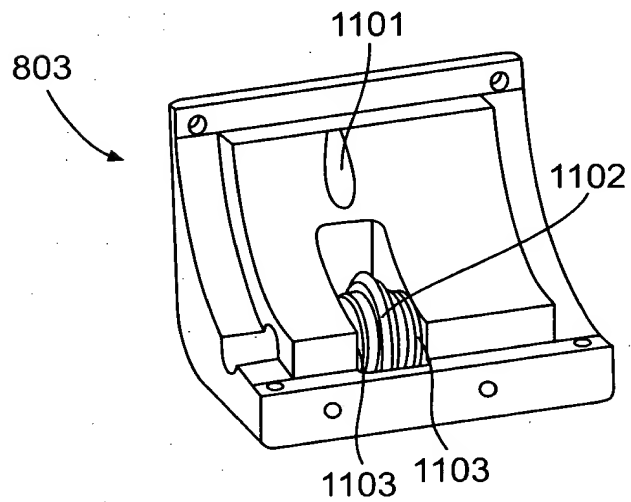


FIG. 11

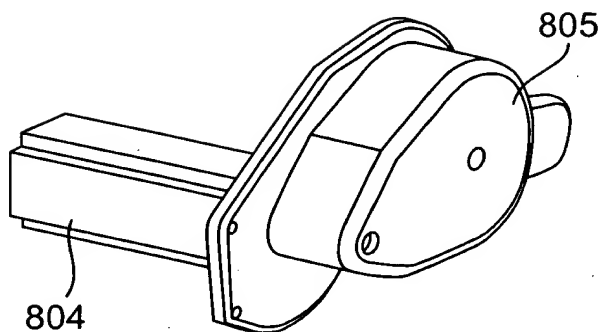


FIG. 12

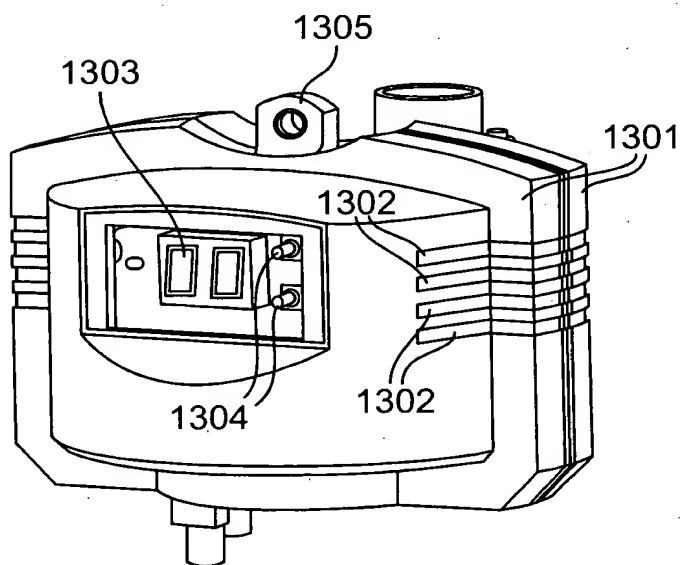


FIG. 13

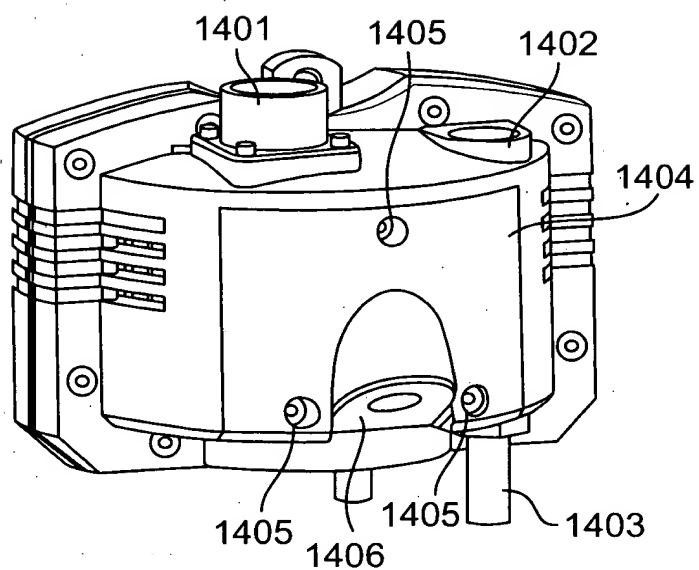


FIG. 14

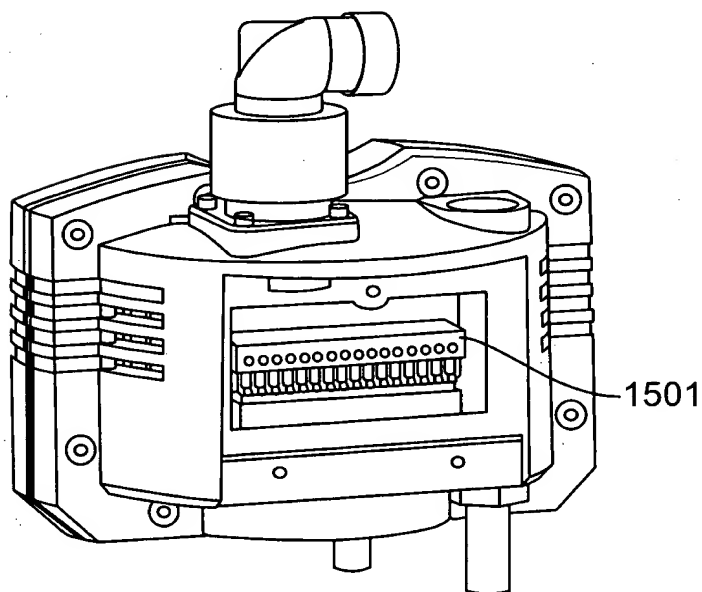


FIG. 15

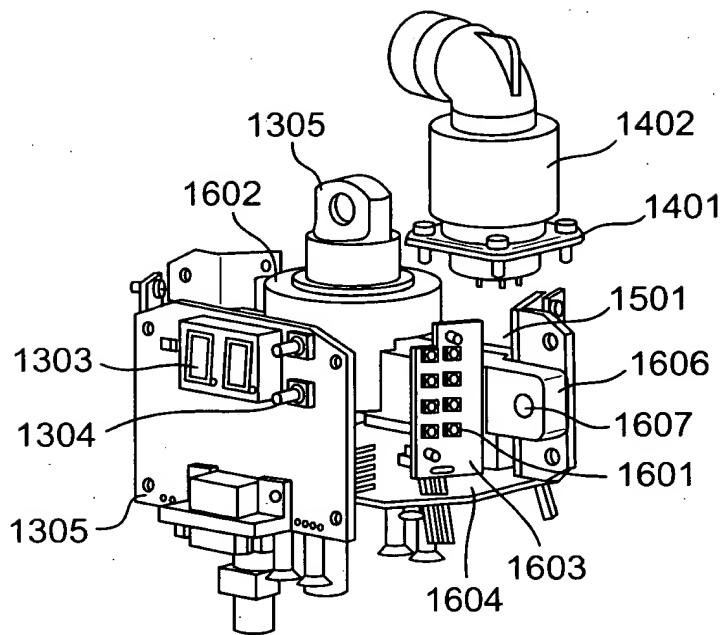
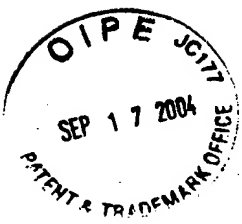


FIG. 16

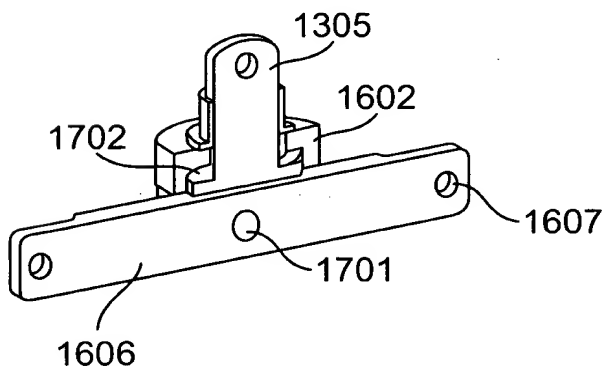


FIG. 17

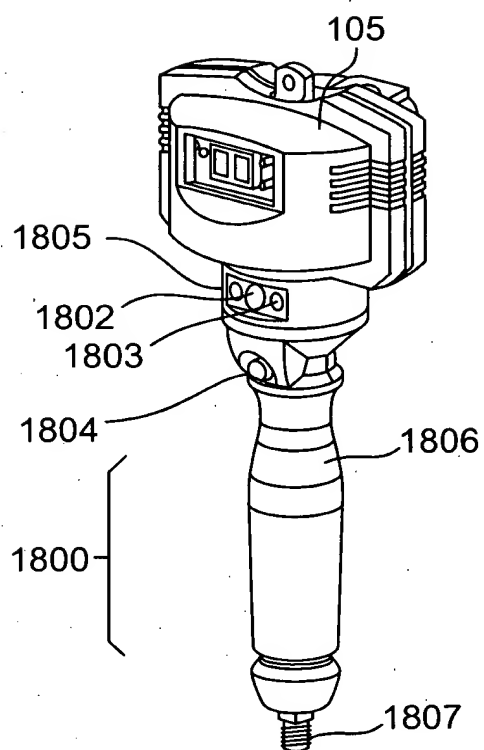
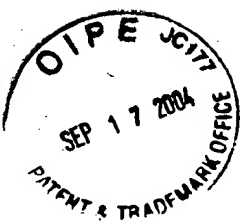


FIG. 18

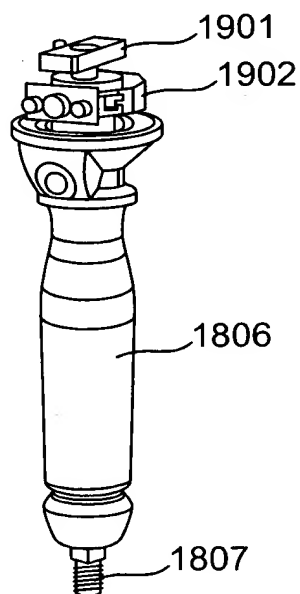


FIG. 19

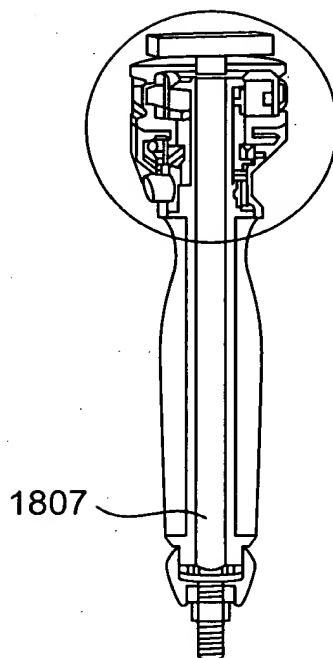


FIG. 20A

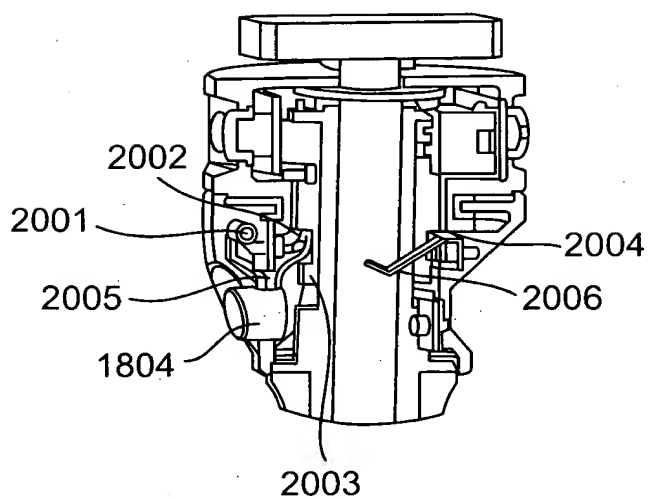


FIG. 20B

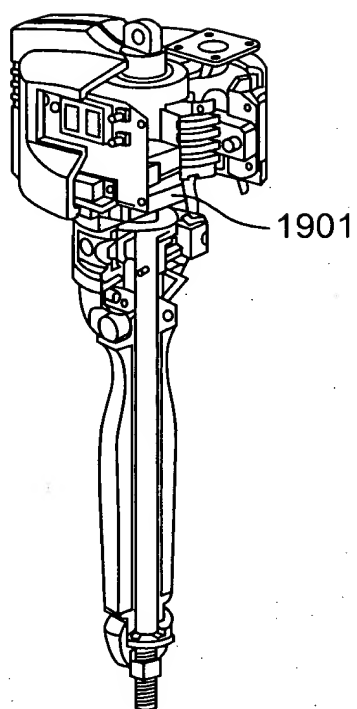


FIG. 21

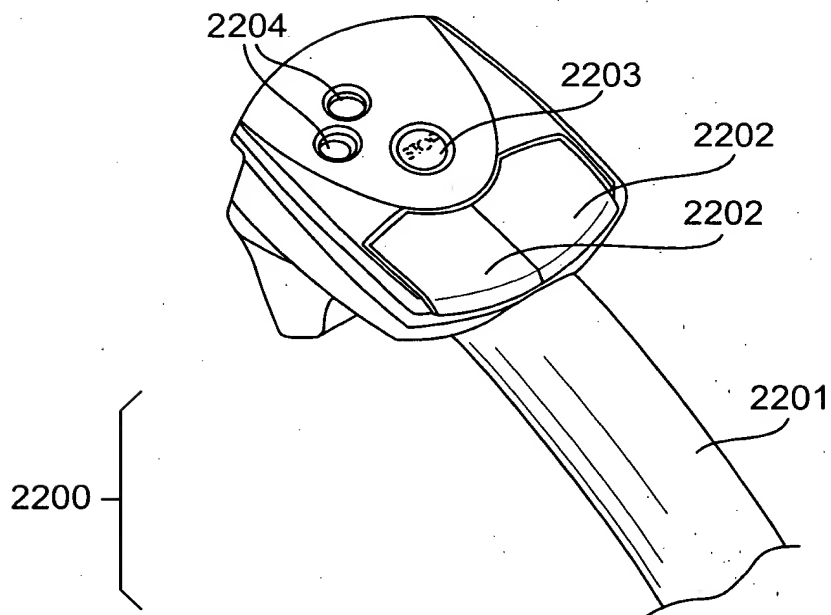


FIG. 22

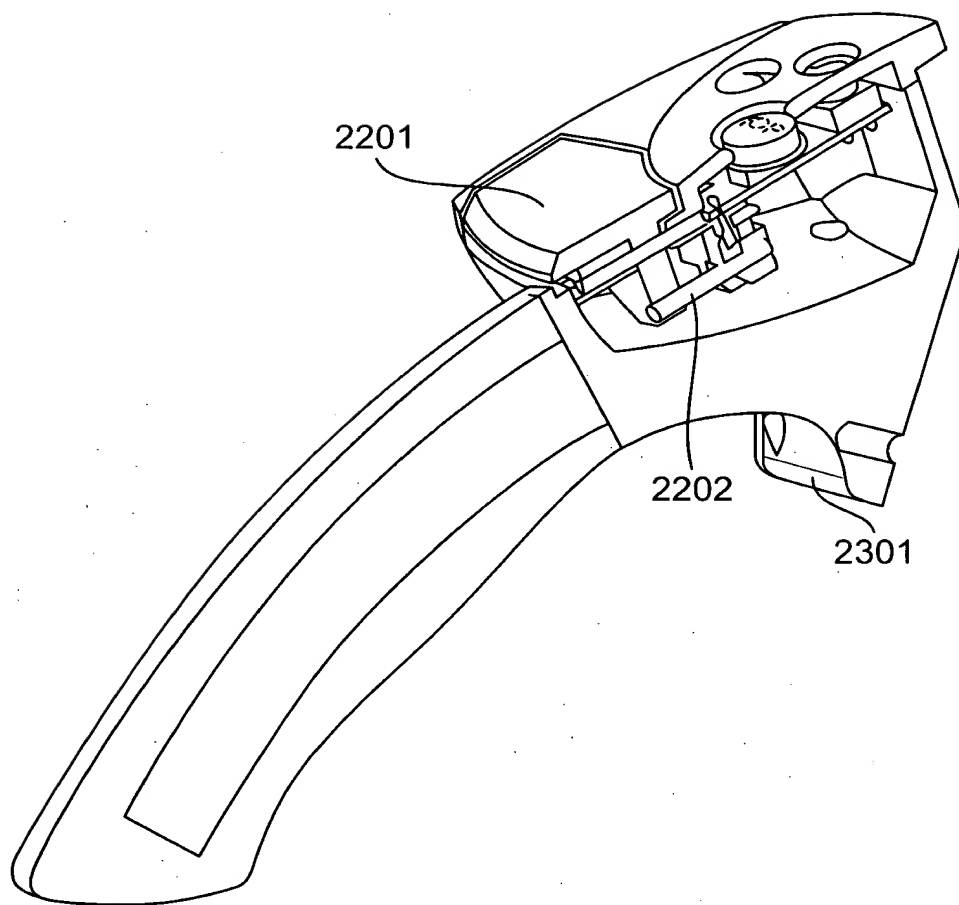
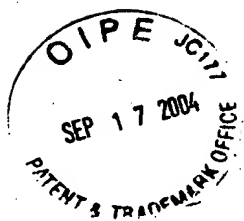


FIG. 23

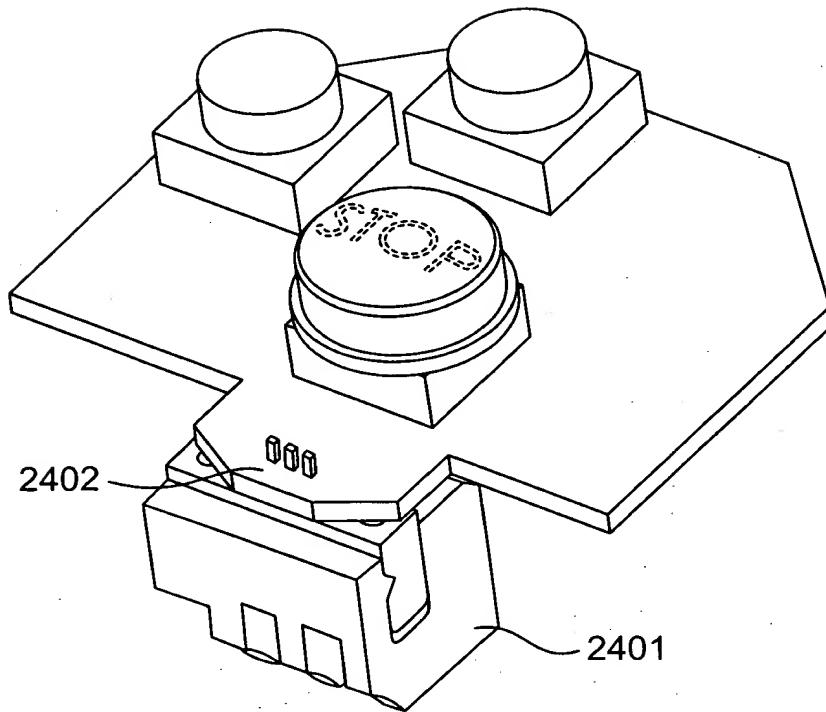


FIG. 24

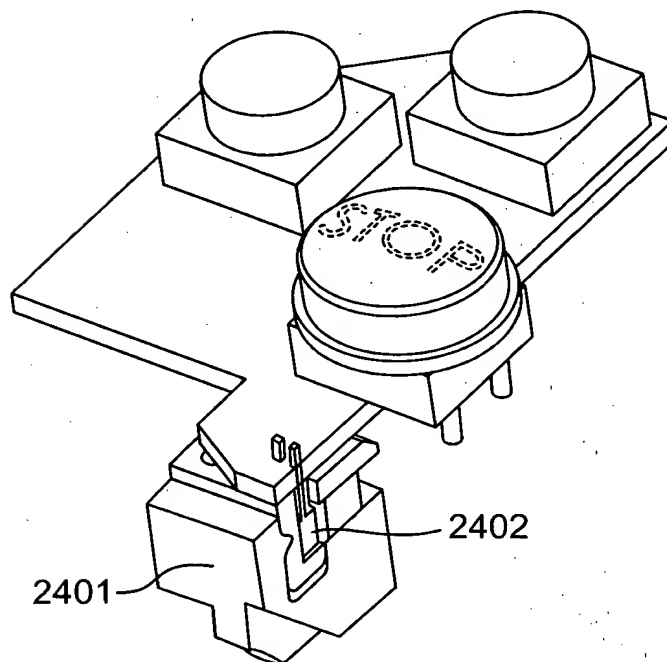
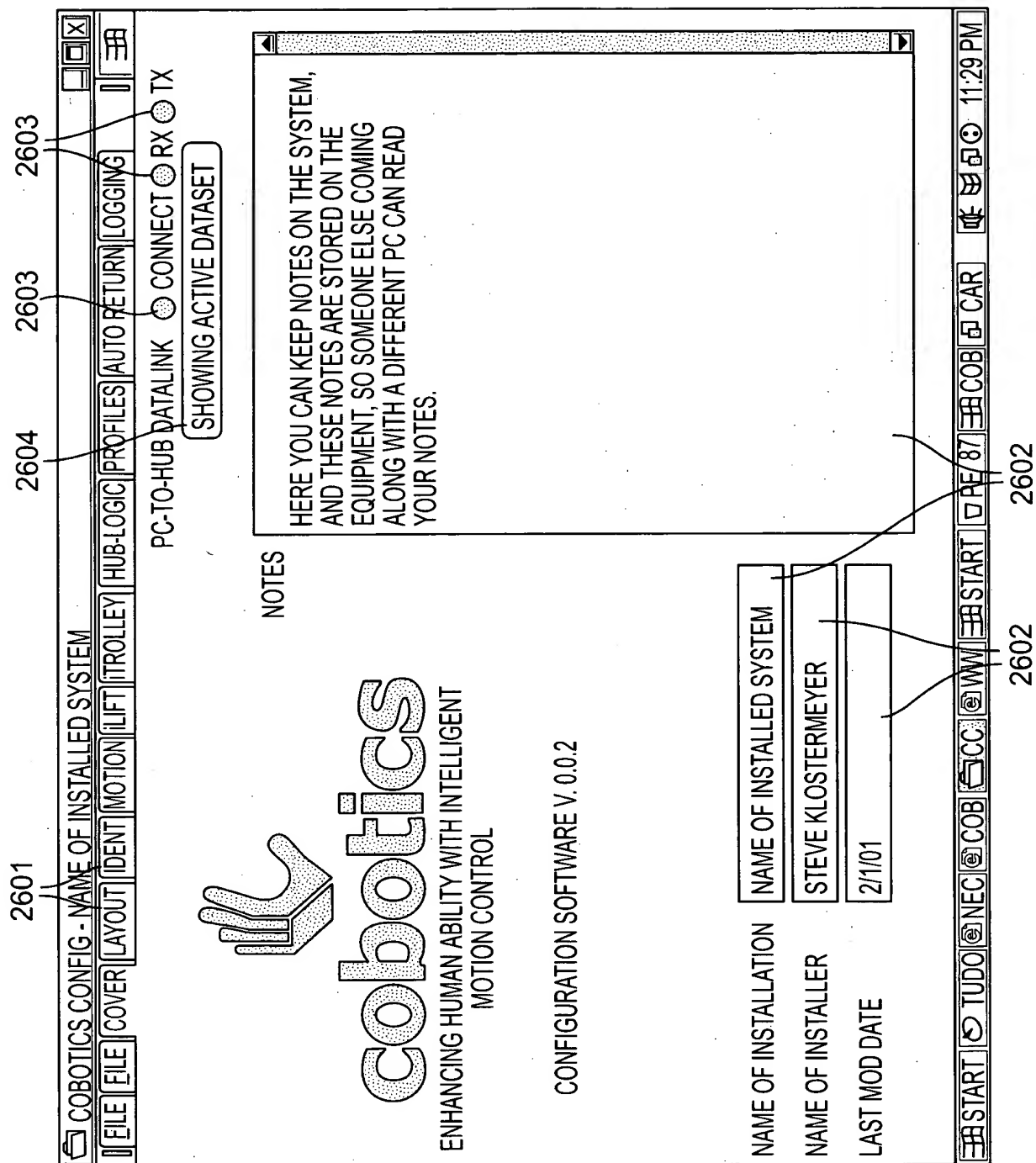


FIG. 25





2702

LAYOUT PANEL
DESIGNATE THE OVERALL LAYOUT OF YOUR SYSTEM

CHECK THE BOXES OF
COMPONENTS YOU HAVE

VERTICAL MOTION

☐ NONE

☒ COBOTICS LIFT

☒ INLINE HANDLE

☐ PENDANT HANDLE

☐ OTHER HOIST OR BALANCER

LATERAL MOTION

☐ NONE

☐ MONORAIL SYSTEM WITH POWERED
MOTION ALONG MONORAIL

☒ XY RAIL SYSTEM WITH POWERED
MOTION OF BRIDGE

☒ BRIDGE IS MOVED BY IT TROLLEY ON
CENTRAL RAIL

☒ ONE IT TROLLEY

☐ TWO IT TROLLEYS IN TANDEM

☒ CABLE ANGLE SENSOR

☐ PUSH-BUTTON ACTUATOR

☐ FORCE BAR

☐ COLUMN ROTATION SENSOR

☐ BRIDGE IS MOVED BY IT TROLLEY ON
RUNWAY RAIL

☒ MOTION ALONG BRIDGE RAIL IS
ALSO POWERED

☒ ONE IT TROLLEY

☐ TWO IT TROLLEYS IN TANDEM

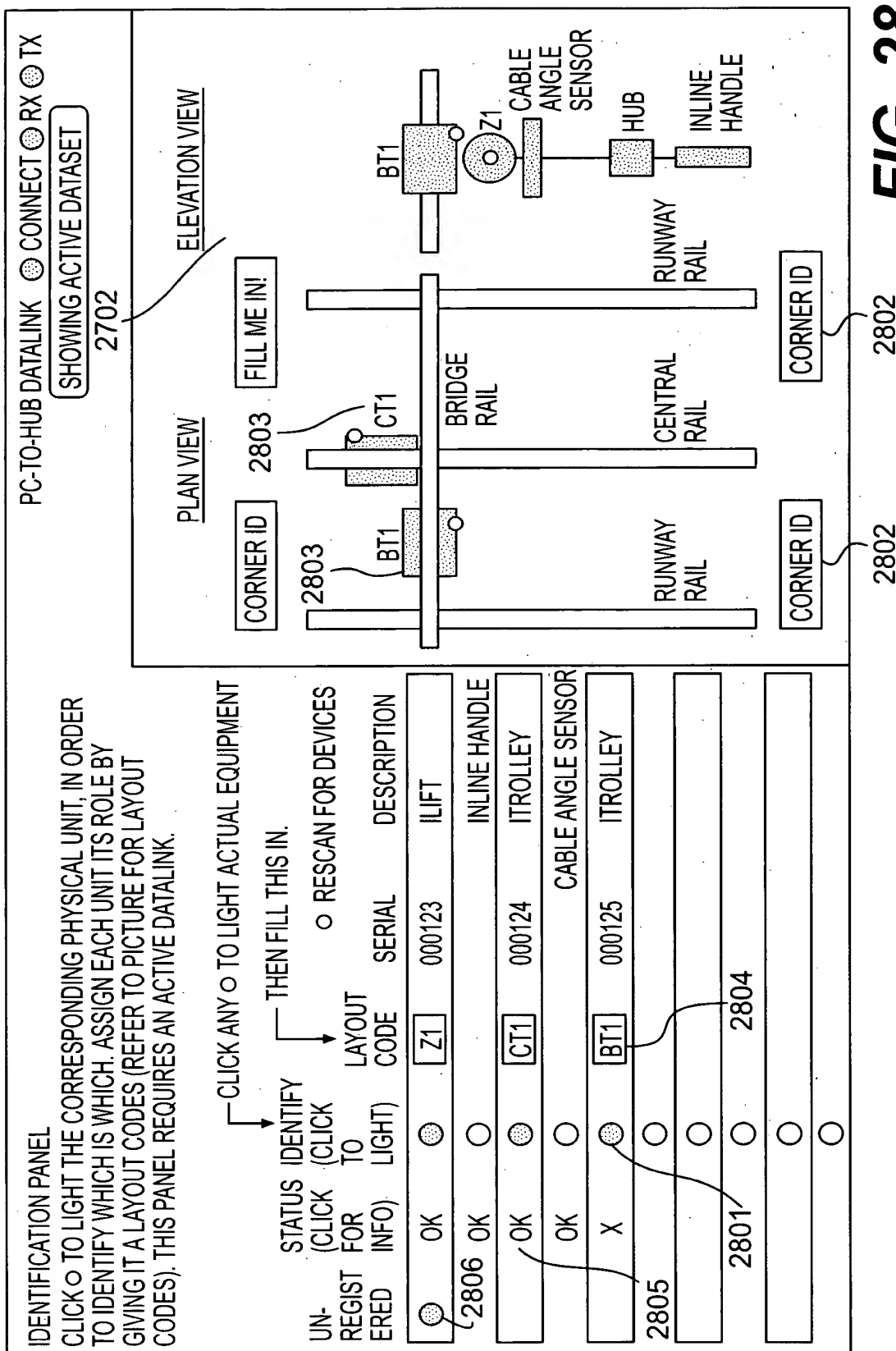
PC-TO-HUB DATALINK ☐ CONNECT ☐ RX ☐ TX

SHOWING ACTIVE DATASET

PLAN VIEW

ELEVATION VIEW

FIG. 27



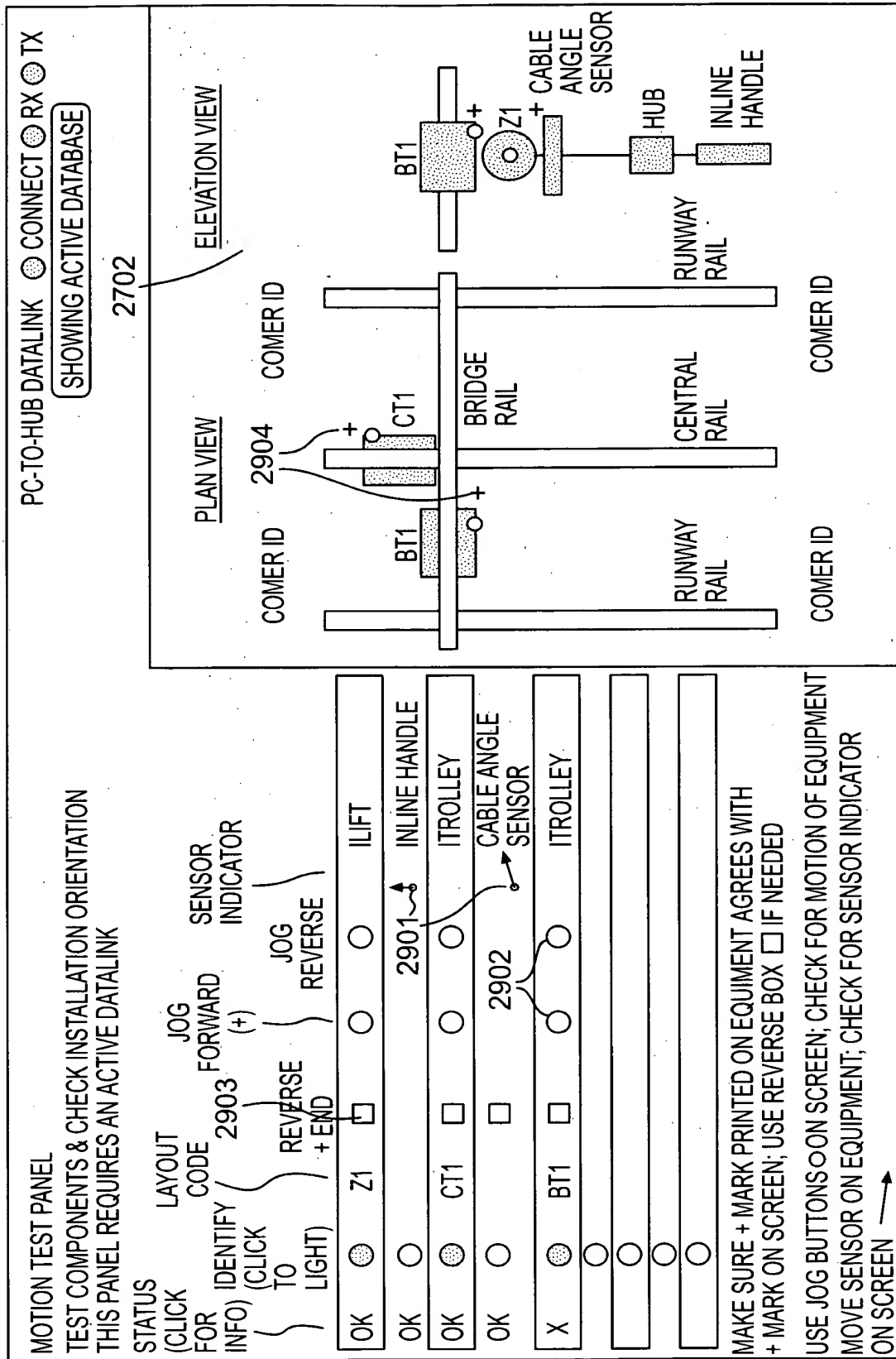


FIG. 29



ILIFT SETUP PANEL

PC-TO-HUB DATALINK ☐ CONNECT ☐ RX ☐ TX

SHOWING ACTIVE DATASET

3001

3002

SET VALUE ← ← ← LEARN ← ← ← INSTANTANEOUS VALUE

SPEED LIMIT

UPWARD ☐ 1.25 M/S

DOWNWARD ☐ 1.25 M/S (DOWNWARD SLAVES UPWARD)

ACCELERATION LIMIT

UPWARD ☐ 1.25 M/S² (HIGHER VALUES ARE PERKIER)

DOWNWARD ☐ 1.25 M/S²

HANDLE

SENSITIVITY ☐ 1.25

DEADBAND ☐ 1.25%

NULL ☐ 1.25 3003 3005 3004 2.1234 3006 "LEARN" WHEN WHEN HANDLE IS AT NULL POSITION

MOTION STOPS

UPPER ☐ 1.25 M 2.1234

LOWER ☐ 1.25 M 2.1234

FIG. 30



3100 →

LATERAL MOTION SETUP PANEL		PC-TO-HUB DATALINK <input type="radio"/> CONNECT <input type="radio"/> RX <input type="radio"/> TX	
		<input type="button" value="SHOWING OFFLINE DATASET"/>	
SET VALUE ← ——— LEARN ← ——— INSTANT VALUE			
SPEED LIMIT	<input type="text" value="1.25 M/S"/>		
ACCELERATION LIMIT	<input type="text" value="1.25 M/S<sup>2</sup>"/>		
ESTIMATE OF MOVING MASS ON BRIDGE	<input type="text" value="1.25 KG"/> <input type="radio"/> MEASURE IT BY JOGGING BRIDGE		
ESTIMATE OF MOVING MASS ON CARRIAGE	<input type="text" value="1.25 KG"/> <input type="radio"/> MEASURE IT BY JOGGING CARRIAGE		
ESTIMATE OF BRIDGE LENGTH	<input type="text" value="1.25 M"/> <input type="radio"/> MEASURE IT BY SKEWING BRIDGE		
BRIDGE SKEW NULL	1.25	<input type="radio"/> JOG + <input type="radio"/> JOG - <input type="radio"/> JOG IT STRAIGHT; THEN "LEARN"	
CABLE ANGLE SENSOR			
SENSITIVITY	<input type="text" value="1.25"/>		
DEADBAND	<input type="text" value="1.25%"/>		
NULL	1.25, 1.25, 5.00	<input type="radio"/> LEAVE IT VERTICAL; THEN "LEARN"	
FORCE BAR			
SENSITIVITY	<input type="text" value="1.25"/>		
DEADBAND	<input type="text" value="1.25%"/>		
NULL	1.25, 1.25, 5.00	<input type="radio"/> DON'T TOUCH IT; THEN "LEARN"	
END OF TRAVEL LIMIT RUNWAY (-Y)	1.25	<input type="radio"/>	2.1234
END OF TRAVEL LIMIT RUNWAY (+Y)	1.25	<input type="radio"/>	2.1234
END OF TRAVEL LIMIT BRIDGE (-X)	1.25	<input type="radio"/>	2.1234
END OF TRAVEL LIMIT BRIDGE (+X)	1.25	<input type="radio"/>	2.1234

FIG. 31

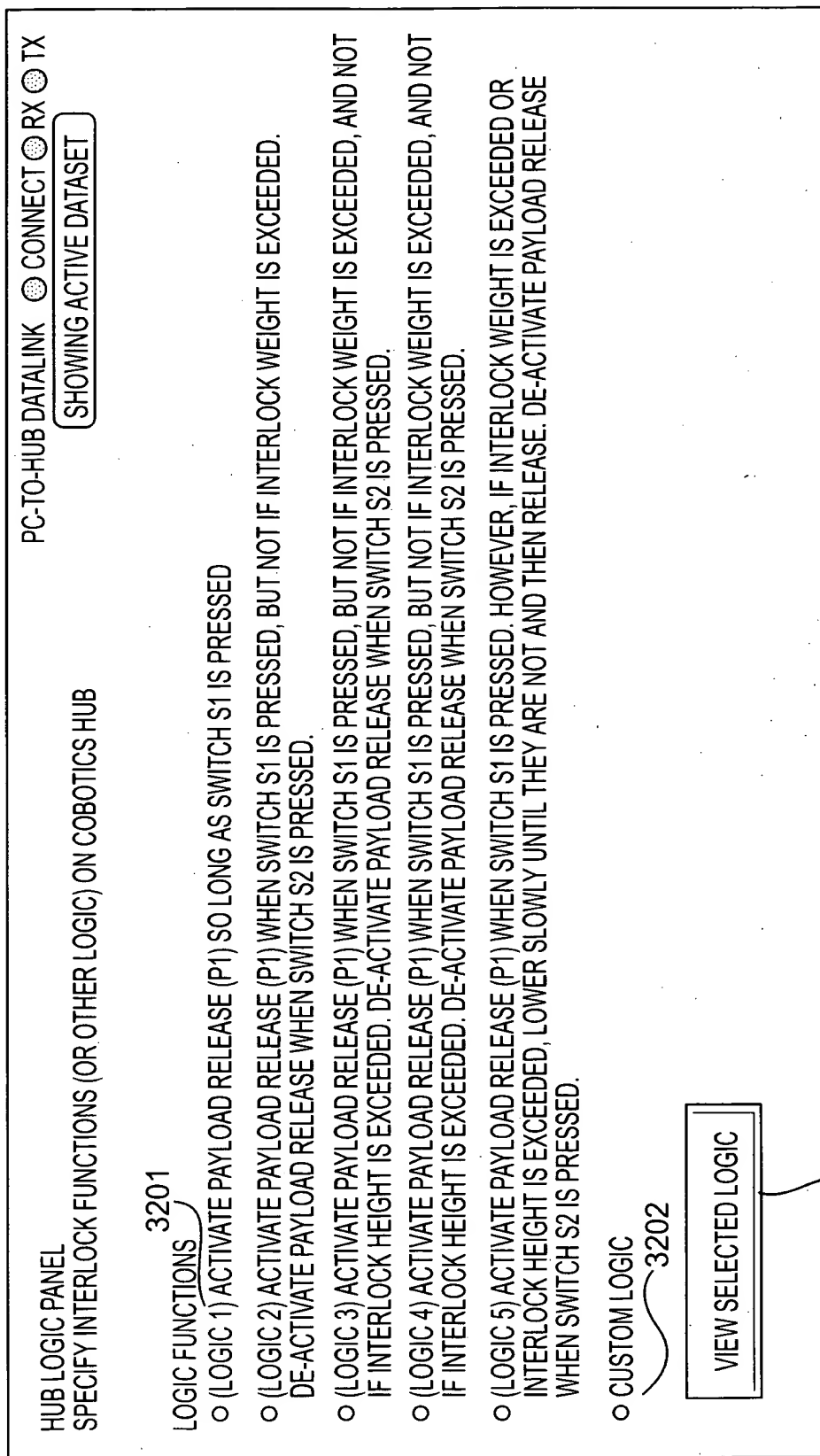


FIG. 32

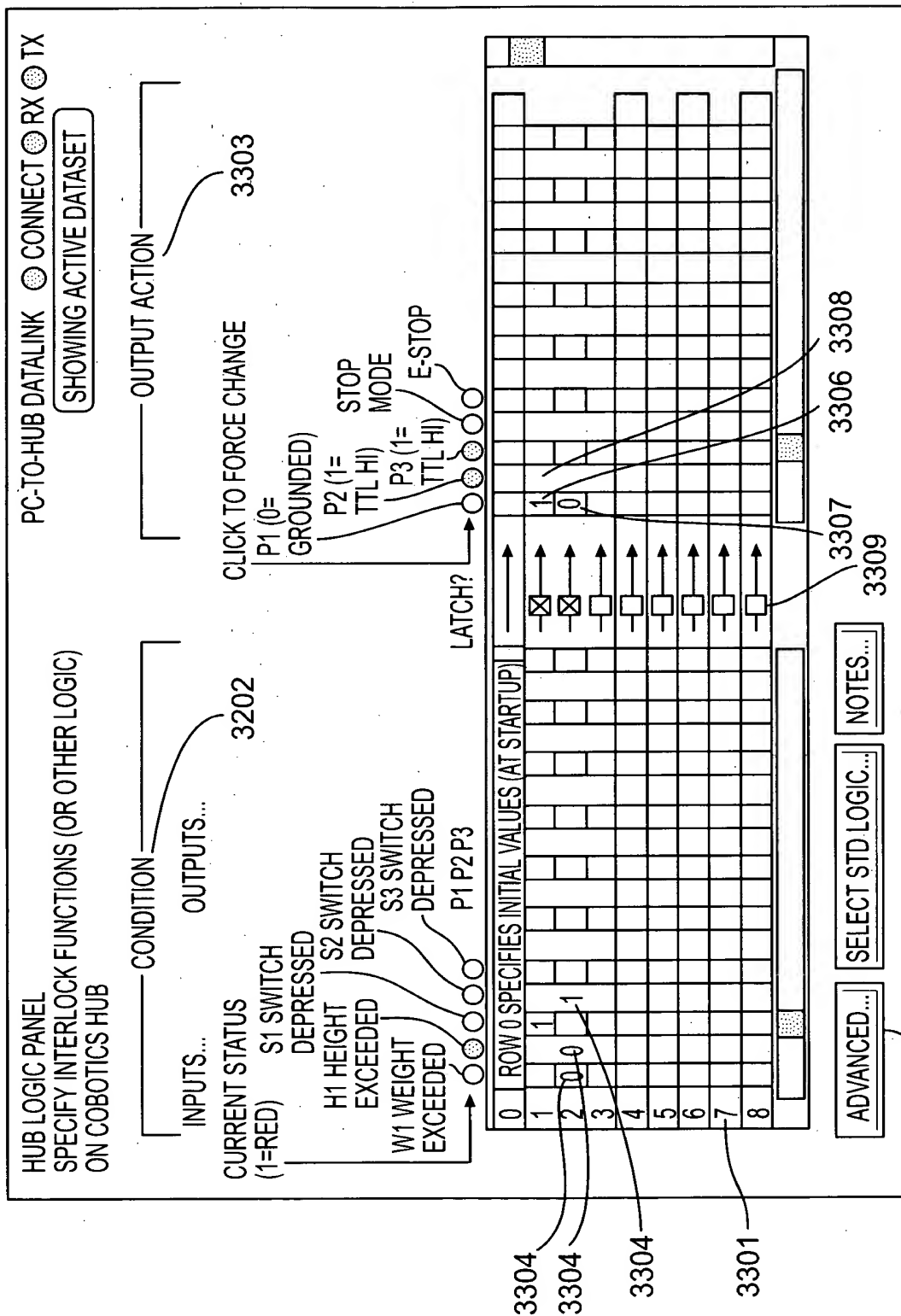
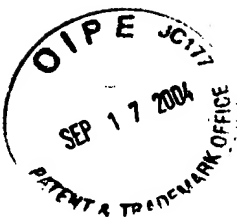


FIG. 33



PC-TO-HUB DATALINK ☐ CONNECT ☒ RX ☐ TX

SHOWING ACTIVE DATASET

PROFILES SETUP PANEL
ALL SELECTIONS ARE SUBJECT TO OVERALL LIMITS,
ON ILIFT & ITROLLEY PAGES — 3402 — 3401

PROFILE ID 3403	MD	HI	SK
OWNER NAME	DEFAULT MEDIUM PROFILE	DEFAULT FAST PROFILE	STEVE KLOSTERMEYER
ILIFT SPEED LIMIT	MIN <input type="text"/> MAX	MIN <input type="text"/> MAX	MIN <input type="text"/> MAX
ACCELERATION LIMIT	MIN <input type="text"/> MAX	MIN <input type="text"/> MAX	MIN <input type="text"/> MAX
SENSITIVITY	MIN <input type="text"/> MAX	MIN <input type="text"/> MAX	MIN <input type="text"/> MAX
DEADBAND	MIN <input type="text"/> MAX	MIN <input type="text"/> MAX	MIN <input type="text"/> MAX
ITROLLEY SPEED LIMIT	MIN <input type="text"/> MAX	MIN <input type="text"/> MAX	MIN <input type="text"/> MAX
ACCELERATION LIMIT	MIN <input type="text"/> MAX	MIN <input type="text"/> MAX	MIN <input type="text"/> MAX
SENSITIVITY	MIN <input type="text"/> MAX	MIN <input type="text"/> MAX	MIN <input type="text"/> MAX
DEADBAND	MIN <input type="text"/> MAX	MIN <input type="text"/> MAX	MIN <input type="text"/> MAX
3404			

USE DEFAULT VALUES OLO
O MD O HI

☐ REMOVE PROFILE
☐ ADD NEW PROFILE

USE DEFAULT VALUES OLO
O MD O HI

☐ REMOVE PROFILE
☐ ADD NEW PROFILE

USE DEFAULT VALUES OLO
O MD O HI

☐ REMOVE PROFILE
☐ ADD NEW PROFILE

INSTRUCTIONS: OPERATORS CAN SELECT THEIR INDIVIDUALIZED PROFILE AT THE HUB. MOVE SLIDERS TO ADJUST
FEEL. SLIDER VALUES ARE RELATIVE TO LIMITS SET ON THE ILIFT AND ITROLLEY SETUP PAGES. YOU CAN
SET A PROFILE TO THE LO, MD OR HI DEFAULTS BY CLICKING A BUTTON.

FIG. 34

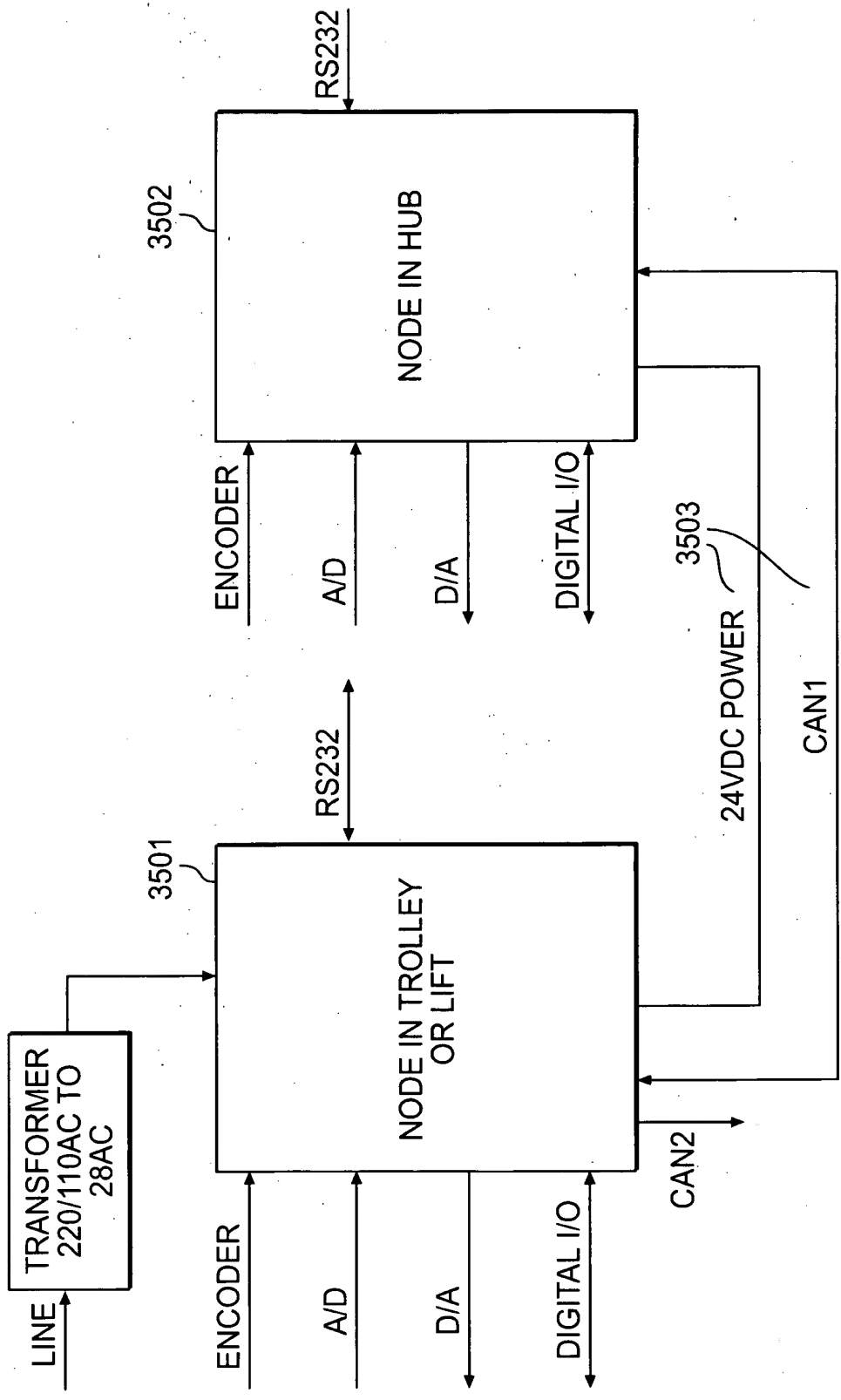
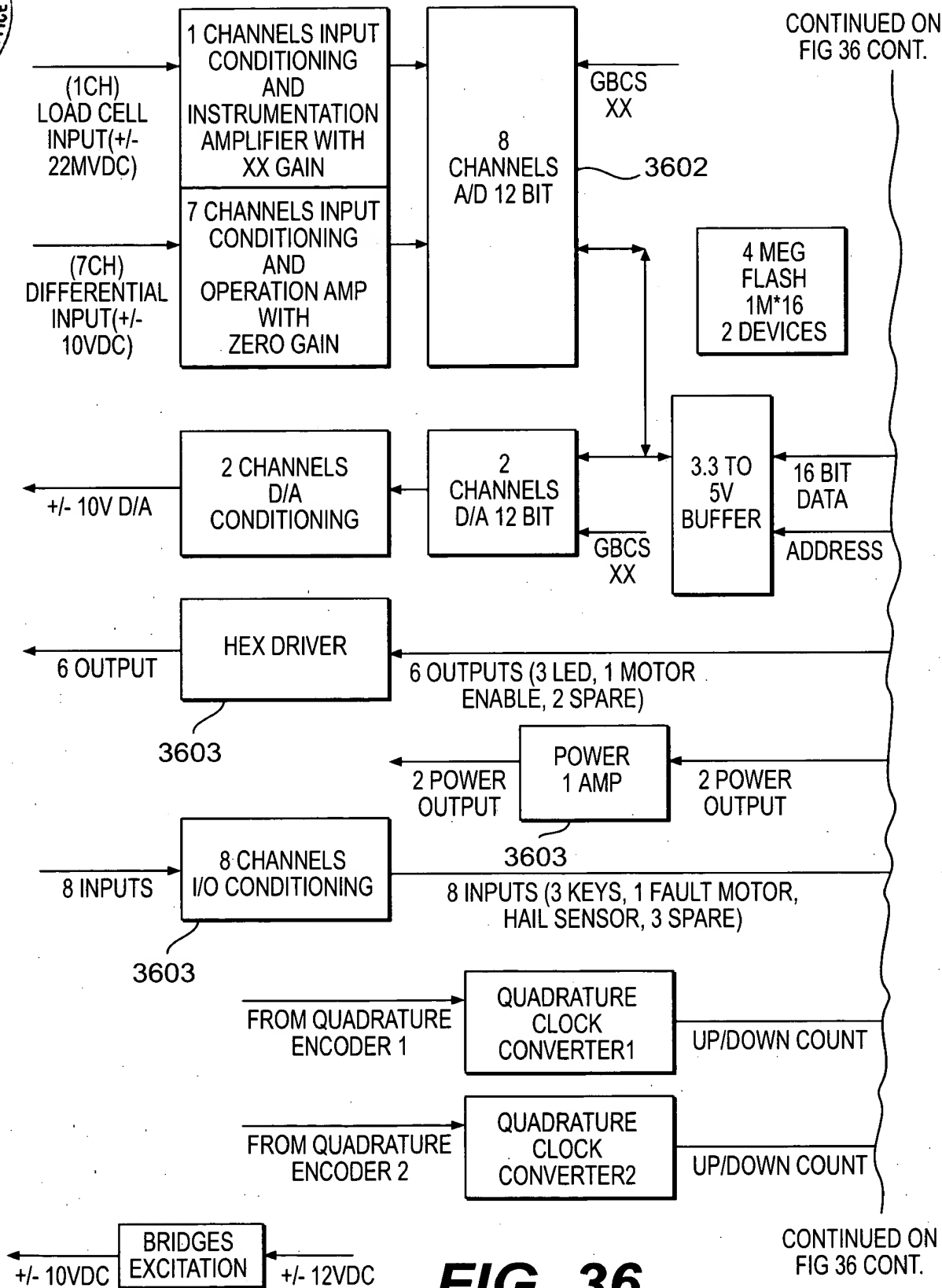
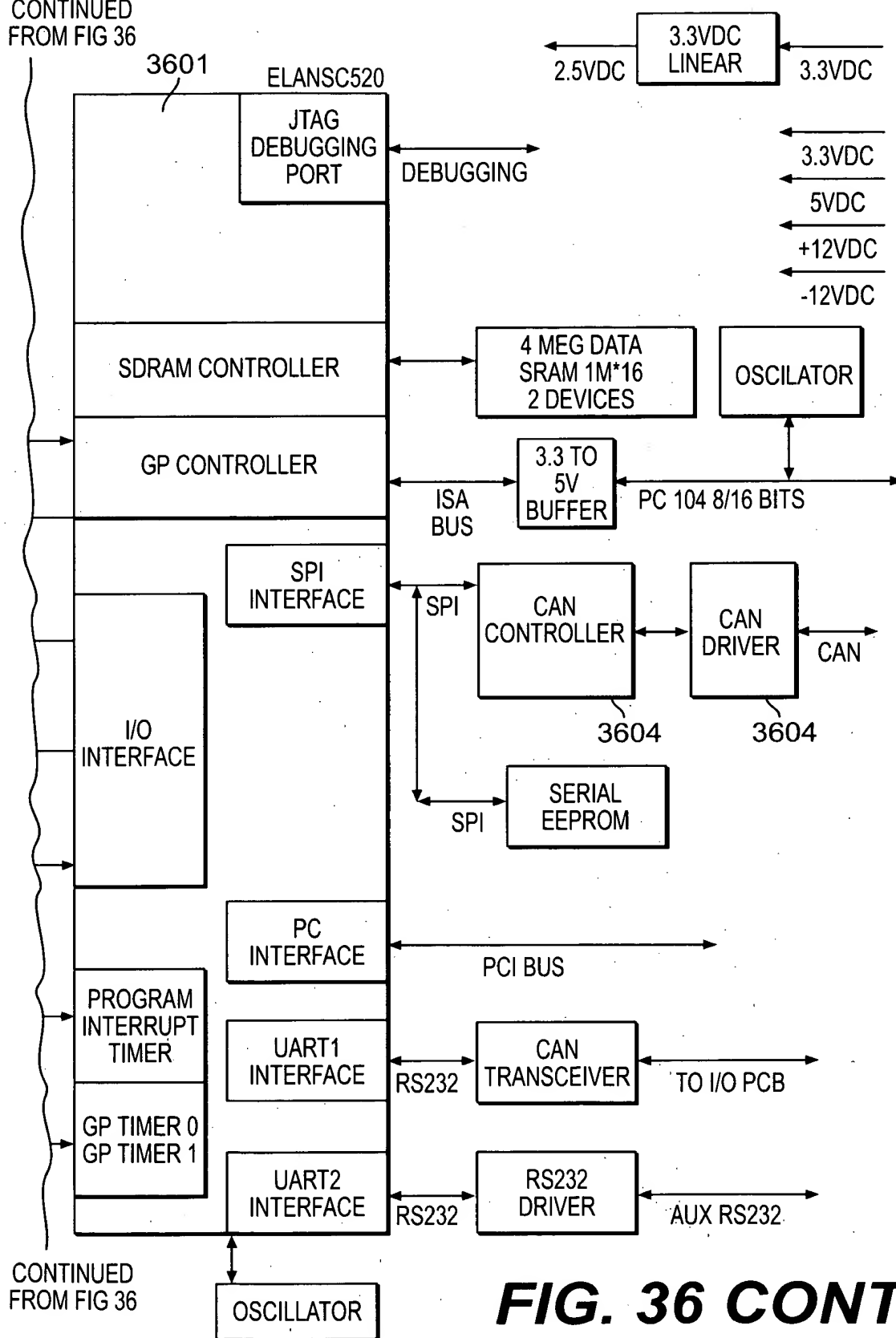


FIG. 35





CONTINUED
FROM FIG 36



CONTINUED
FROM FIG 36

FIG. 36 CONT.

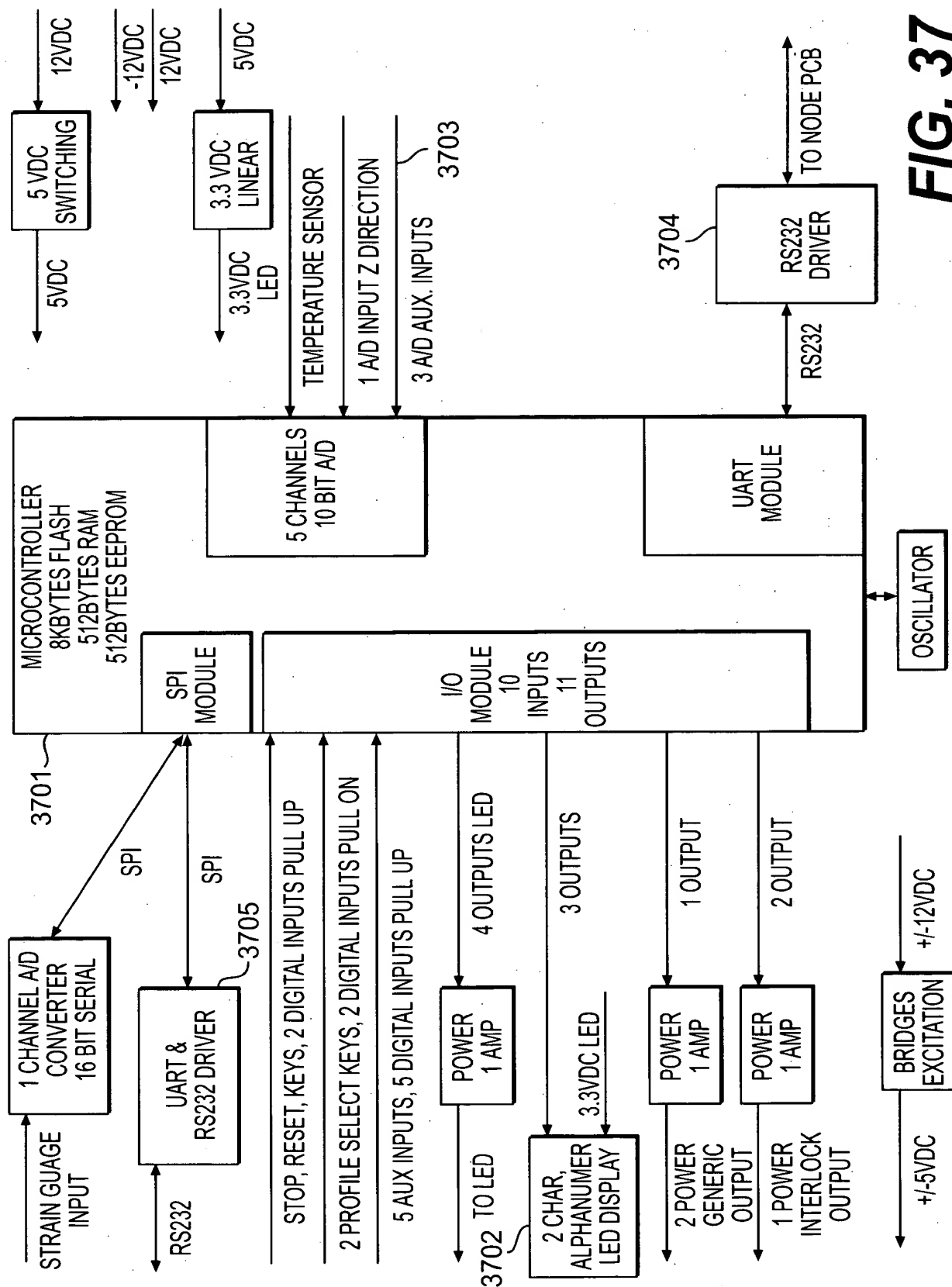


FIG. 37



FIELD	SIZE (BYTES)	DATA FORMAT	DESCRIPTION
SIZE	1	BINARY	PACKET SIZE.
DEVICE_ID	1	BINARY	DESTINATION DEVICE ID.
CMD_TYPE	1	BINARY	COMMAND TYPE.
DATA	VARIABLE	BINARY	ACTUAL DATA ASSOCIATED WITH THE CMD_TYPE FIELD.
CHKSUM	1	BINARY	CHECKSUM OF PACKET. THIS BYTE EQUALS TO THE TWO'S COMPLEMENT OF THE SUM OF THE SIZE, DEVICE_ID, TYPE AND DATA, OMITTING ANY CARRY.

FIG. 38